



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
-----------------	-------------	----------------------	---------------------	------------------

10/815,636

04/02/2004

Kia Silverbrook

HYJ001US

9669

24011 7590 01/09/2009  
SILVERBROOK RESEARCH PTY LTD  
393 DARLING STREET  
BALMAIN, 2041  
AUSTRALIA

EXAMINER

GRANT II, JEROME

ART UNIT

PAPER NUMBER

2625

MAIL DATE

DELIVERY MODE

01/09/2009

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/815,636	<b>Applicant(s)</b> SILVERBROOK ET AL.	
	<b>Examiner</b> Jerome Grant II	<b>Art Unit</b> 2625	

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 08 October 2008.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-130 is/are pending in the application.
- 4a) Of the above claim(s) 16-130 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1 and 4-7 is/are rejected.
- 7) ☒ Claim(s) 8-15 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☒ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)            | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | Paper No(s)/Mail Date. _____                                      |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>10/08; 5/08; 2/07; 9/04</u> .                                 | 6) <input type="checkbox"/> Other: _____                          |

### **Detailed Action**

1.

Invention I, species II has been selected for examination.

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 1 and 4 are rejected under 35 U.S.C. 102(e) as being anticipated by Havens.

With respect to claim 1, Havens teaches a sensing device (5,5-1), see also figure 1a, for sensing coded data disposed on a surface (i.e., code information for target T); and generating interaction data based on the sensed data, the interaction data being indicative of interaction of sensing device (via an image capture enable signal generated by control block 135 (recited in para. 37); the sensing device comprising: an

Art Unit: 2625

image sensor 182 for capturing image data; an analog to digital converter 136 for converting the captured image information; an image processor (control 135 and clock 137) for processing the image to generate processed image data; a host processor CPU 140/141 and control block 135 for generating interaction data based on at least partially on the processed data.

With respect to claim 4, Havens teaches a first framestore 149.

2.

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 5 and 6 are rejected under 35 U.S.C. 103(a) as being unpatentable over Haven in view of Tower '397.

With respect to claim 5, Haven teaches where the image sensor and A/D converter are on the same chip 182. It is not clear from the reference if it is a monolithic type device.

Art Unit: 2625

Tower teaches a fabrication of an image sensing device 12 and A/D converter 18 on a monolithic IC 10, see col. 3, lines 25-30.

Therefore, to one of ordinary skill in the art, it would have been obvious to fabricate the sensor and A/D converter on a monolithic IC as specifically taught by Towers, showing that it is well known in the art to fabricate such sensors.

With respect to claim 6, Haven teaches all of the subject matter upon which the claim depends except the frame grabber integrated on the monolithic circuit. Figure 2a of Haven teaches integrating the frame grabber with the image sensor and A/D converter which are on the same IC.

Tower shows a plurality of electrical components integrated on monolithic ICs. Therefore, to one of ordinary skill in the art, it would have been obvious to integrate an additional circuit such as a frame grabber onto a monolithic circuit for the reason that Towers suggests plural circuits can be fabricated on a monolithic IC.

3.

Claim 7 is rejected under 35 U.S.C. 103(a) as being unpatentable over Havens.

While Havens does not use the term “sub-sampling” ,it is understood that sub-sampling does occur for the reason that at the start of every new frame signal generated based on a clock signals for generating synchronizing signals for capturing one row at a time of a captured image. See para. 37 Sub-sampling does occur for at least each row of image data captured.

4.

Claims 8-15 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

5.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jerome Grant II whose telephone number is 571-272-7463. The examiner can normally be reached on Mon.-Fri. from 9:00 to 5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Edward Coles, can be reached on 571-272-7402. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

/Jerome Grant II/

Primary Examiner, Art Unit 2625